REVISTA DA ESCOLA DE ENFERMAGEM DA USP
JOURNAL OF SCHOOL OF NURSING · UNIVERSITY OF SÃO PAULO

DOI: http://dx.doi.org/10.1590/S0080-623420160000700003

LETTER TO THE EDITOR

What if we miss the red and orange cases?

Amir Mirhaghi[1]

[1] Evidence-Based Caring Research Center, Department of Medical-Surgical Nursing, School of Nursing and Midwifery, Mashhad University of Medical Sciences, Mashhad, Iran. mirhaghi@mail.com

I have read the outstanding publication in the Rev Esc Enferm USP Journal from Silva et al. entitled "Triage in an adult emergency service: patient satisfaction"[1]. The authors concluded that there was a high level of patient satisfaction. The patients being categorized in red and orange have been excluded from sampling, so it may result in undercoverage. Undercoverage occurs when all subgroups of the target population are not adequately represented in the sample. In Silva et al.'s study, only nonemergency patients (categories Yellow, Green and Blue) were included, so emergency patients (categories Red and Orange) were excluded from the study. The main focus of Emergency department (ED) is to provide emergency care to critically ill patients (Red and Orange cases) in a timely manner[2]. Therefore it might be a major flaw in the research methodology to exclude emergency patients, especially Red and Orange cases, from the study. In fact, the undercoveraged target population may threaten the internal validity of the study of patient satisfaction in the ED. Therefore, it may be concluded that studies should not only include emergency patients but also should weigh the results based on patient acuity scores or triage categories.

It is critical to interpret patient satisfaction results in regard to patient acuity. It would not be helpful if a patient with common cold is visited in less than 30 minutes, while it takes more than 10 minutes to perform an electrocardiogram for a patient with chest pain. Unfortunately, it`s not clear the association between waiting time and patient acuity with patient satisfaction in the current study. Often, there is a poor correlation between the results of the triage nurse's evaluation and patients' perception of their medical condition on the patient acuity level at the time of triage[3], so it is expected that nonemergency patients perceive dissatisfaction with waiting time in the ED. You may find even more exhausting to convince a patient with simple common cold to wait 240 minutes to see a physician.

It is also worth mentioning that overcrowding might play a role as mediating variable and confounded the results. Finally, it is recommended that patient satisfaction be weighed by patient acuity in the emergency department in the future studies.

REFERENCES

1. Silva PL, Paiva L, Faria VB, Ohl RIB, Chavaglia SRR. Triage in an adult emergency service: patient satisfaction. Rev Esc Enferm USP [Internet]. 2016 [cited 2016 Oct 22];50(3):427-32. Available from: http://www.scielo.br/pdf/reeusp/v50n3/0080-6234-reeusp-50-03-0427.pdf
2. Mirhaghi A, Heydari A, Mazlom R, Ebrahimi M. Reliability of the Manchester Triage System (MTS): a meta-analysis. J Evid Based Med. 2016 Sep 9. doi: 10.1111/jebm.12231. [Epub ahead of print]
3. Mirhaghi A, Heydari A, Ebrahimi M, Noghani-Dokht-Bahmani M. Nonemergent patients in the Emergency Department: an ethnographic study. Trauma Mon. 2016;21(4):e23260.

AUTHORS' RESPONSE

Dear reader

First of all, we thank you for reading our study and pointing out your questions in the letter to the editor. Within our right to respond, we would like to make a few considerations.

The concern of the letter to the editor's author led the authors of this study to reflect. Among the aspects criticized, it was possible to extract the following points, here clarified:

1. Regarding the question "*only nonemergency patients (categories Yellow, Green and Blue) were included, so emergency patients (categories Red and Orange) were excluded from the study.*" the article makes it clear that the objective of the study was to "***assess the degree of satisfaction of patients with triage in the adult emergency unit of Hospital das Clínicas at Universidade Federal do Triângulo***

Mineiro (HC/UFTM) in relation to the criteria: trust in the health team, indications of humanization (courtesy, respect and interest), environment (comfort, cleanliness and signage), timely care and referral or scheduling of appointments".

In the study objective, we explicitly pointed out that the study was developed in the "***triage sector***" of the adult emergency unit of Hospital das Clínicas at Universidade Federal do Triângulo Mineiro (HC/UFTM), as described in the following extract of the **Method**: "… *300 patients from the triage sector of the adult emergency unit (HC/UFTM) were interviewed. The inclusion criteria were: having sufficient age, preferably 18 or over, being assisted to in the triage sector, being classified as yellow, green or blue, i.e., not presenting a serious risk condition or imminent risk of death, agreeing to participate in the study, having been duly informed, and signing the free and informed consent form."* since our premise was that patients with a serious condition or imminent risk of death (colors orange and red, respectively) would not be able to answer to the study questions, making data collection unfeasible.

2. As regards the question: "*The main focus of Emergency Department (ED) is to provide emergency care to critically ill patients (Red and Orange cases) in a timely manner*". in this sense, we emphasize that at no time the focus of our study was to assess the satisfaction of users in state of emergency.

3. Regarding the question: "*Unfortunately, it's not clear the association between waiting time and patient acuity with patient satisfaction in the current study… there is a poor correlation between the results of the triage nurse's evaluation and patients' perception of their medical condition on the patient acuity level at the time of triage*." once again we emphasize that we did not aim to correlate waiting time and patient satisfaction, or even to investigate the different causes of demand for the emergency service according to the level of patient satisfaction. In other words, it was not the objective of our study to assess patient satisfaction according to the different levels of risk classification. A solution to this question would only be possible with the development of further research, with a different study design, which does not meet the objective of our work.

4. When the readers point out that: "… *overcrowding might play a role as mediating variable and confounded the results*." it is explicit in the article, in the **Method**, that this study focused on sociodemographic variables (gender, age, education and medical specialty) and variables related to patient satisfaction, which were already mentioned in the study objective. Overcrowding is a worldwide phenomenon[1-4] in emergency medical services and, nonetheless, the results in these studies demonstrated satisfaction. Provided that the higher the level of education the greater the patient's criticism regarding the services delivered, a limitation of this study consisted of the data that indicate subjects' precarious education and income, since their level of satisfaction may be related to the low level of quality demanded from public health services by these subjects.

5. For a better understanding of the reality of emergency services in Brazil, we recommend the readers search and consider publications for the organization of the network of public emergency services in Brazil (Federal Decree 5055, of 2001, which establishes the Emergency Mobile Medical Service (SAMU), in cities and regions of the national territory, and provides other terms; and Ordinance 1600, of 2011, by the Ministry of Health (GM/MS), which reformulates the National Policy of Emergency Care and establishes the Emergency Care Network of the Unified Health System), duly cited in the article.

We thank you for your observations and hope to have cleared all your questions regarding our study.

Silva PL, Paiva L, Faria VB, Ohl RIB, Chavaglia SRR.

REFERENCES

4. DeLaney MC, Page DB, Kunstadt EB, Ragan M, Rodgers J, Wang HE. Inability of Physicians and nurses to predict patient satisfaction in the Emergency Department. West J Emerg Med. 2015;16(7):1088-93.

5. Fenton JJ, Jerant AF, Bertakis KD, Franks P. A national study of patient satisfaction, health care utilization, expenditures, and mortality. Arch Intern Med. 2012;172(5):405-11

6. Castañón-González JA Barrientos-Fortes T, Polanco-González C. Reflections concerning the care process in the emergency medical services. Rev Med Inst Mex Seguro Soc. 2016. 54(3):376-9

7. Scrofine S, Fitzsimons V. Emergency department throughput: strategies for success. J Nurs Adm. 2014;44(7/8):375-7